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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,200	09/11/2003	Gary C. Vanstone	EM-1991	9114

5179 7590 10/17/2006

PEACOCK MYERS, P.C.
201 THIRD STREET, N.W.
SUITE 1340
ALBUQUERQUE, NM 87102

EXAMINER

NGUYEN, THONG Q.

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,200

Applicant(s)

VANSTONE ET AL.

Examiner

Thong Q. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,5-13 and 15-20 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Sept. 1, 2006 has been entered.

Response to Amendment

2. The present Office action is made in response to the amendment filed on Sept. 1, 2006. It is noted that in the amendment, applicant has amended claims 1, 3 and 19, and canceled claim 2. There is not any claimed being added from the application. The pending claims 1, 3, 5-13 and 15-20 are examined in this Office action. Note that claims 4 and 14 were canceled by the applicant in the amendment of March 3, 2005.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required.

The specification does not provide a proper antecedent basis for each of the following features: First, the feature related to the "off axis" of the three mirror as recited in each of claims 1 and 11; and Second, the feature that the tertiary mirror

has its focal point located off an alignment axis as recited in each of claims 1 and 19.

Applicant should note that while figures 1-3 shows that the three mirrors are arranged in an off axis manner and the light reflected from the tertiary mirror 16 is focused onto a point located off the alignment axis 20; however, the specification does not positively have any written description to support for the feature claimed.

Claim Objections

4. Claims 3 and 16 are objected to because of the following informalities.

Appropriate correction is required.

a) In claim 3: on line 1, the term "common" should be deleted. Applicant should note that while claim 1 recites an alignment axis shared by all mirrors (see claim 1, lines 4-5); however, the base claim has never used the term "common".

b) In claim 16: on line 2, "the primary and tertiary mirror" should be changed to --the primary and tertiary mirrors--.

Allowable Subject Matter

5. Claims 1, 3, 5-13 and 15-20 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

a) The three mirror off-axis anastigmatic optic as recited in the independent claim 1 and the method of making an off-axis three mirror anastigmatic optic as recited in each of independent claims 11 and 19 is patentable with respect to the prior art, in

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particular, the U.S. Patent Nos. 4,240,707; 6,667,831; 4,737,021; 5,114,555 and 5,862,726 by the limitations related to the structure of the three mirrors. It is noted that while the use of three mirrors for directing light from an object to a receiving system is known to one skilled in the art as can be seen in each of the mentioned Patents, and the formation of the primary and tertiary mirrors on the same substrate is disclosed in each of the Patent Nos. 5,114,555 and 5,862,726; however, the cited art does not disclose that the primary and tertiary mirrors abut one another, and a vertex common to the primary and tertiary mirrors is located at a junction of the primary and tertiary mirrors as claimed.

Response to Arguments

7. Applicant's arguments with respect to claims 1-3, 5-13 and 15-20, now applied to claims 1, 3, 5-13 and 15-20, as provided in the amendment of 9/1/06, pages 5-6, have been fully considered. It is also noted that a complete review of the present claims by the examiner and other primary examiners has resulted that the applicant's arguments are persuasive and thus the rejections of the claims under 35 USC 112, first paragraph and under 35 USC 103(a) are now withdrawn.

Conclusion

8. This application is in condition for allowance except for the following formal matters:

See the objections to the specification and the claims as set forth in this Office action.

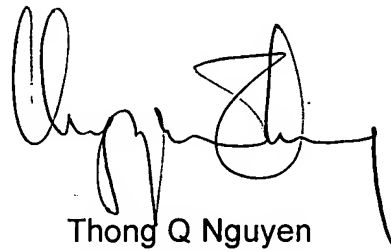
Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
Art Unit 2872
